

AMENDMENTS TO THE SPECIFICATION:

In the Abstract, lines 4, 6, 8 and 10:

ABSTRACT OF THE DISCLOSURE

Each of first and second stations, in communicating with the other station,
5 provides a preamble including forward link parameters and reverse link parameters. The
forward link parameters in each preamble for each individual station are provided for
each station in accordance with the reverse link parameters previously transmitted to the
station in packets from the other station. The reverse link parameters in each preamble in
each individual station provide an indication to the other station of the forward link
10 parameters to be provided by the other station in the next transmission of a packet to the
individual station from the other station. Data is provided in packets at each station to be
transmitted to the other station. Each packet transmitted by each station to the other
station includes a preamble and includes data after the preamble. ~~In addition to the
forward link parameters and the reverse link parameters, each preamble may include a~~
15 ~~training sequence which provides sequence for synchronizing the operation of each~~
~~station with the operation of the other station and for facilitating the recovery and~~
~~processing of data transmitted to each station from the other station. Parameters from a~~
~~higher layer network may be provided at each station to modify the reverse link~~
~~parameters to be provided at the station for indicating to the other station the forward link~~
20 ~~parameters to be transmitted in the next packet from the station to the other station.~~

Page 4, line 13:

The receiver 12 in the system 10 includes a bus 26 (Figure 1) for receiving signals
from the transmitter 22 in the system 20. The signals may constitute a preamble
generally indicated at 34 in Figures 2 and 4 and may also include data 38 following the
preamble. The preamble 34 and the data 38 are provided in packets generally indicated at
40. The signals received on the line 26 are introduced to a preamble detector 28 and to a

5 receive waveform processor 30. The preamble detector 28 detects signals constituting forward link parameters 32 in the preamble 34 in Figure 2 and introduces these signals through a bus 36 to the receive waveform processor 30. The processor 30 processes the data in the packet in accordance with the forward link parameters on the bus 36 to provide data signals on a bus 74 for further processing.

Page 6, line 16:

10 As another example, the forward link parameters 32 may identify the code rate of the forward error correction. As a further example, the forward link parameters 34 may identify the spreading factor. The spreading factor identifies the progressive frequencies at which successive packets 40 are transmitted by the transmitter in one of the systems such as the system 10 to the receiver in the other one of the systems such as the system 20. The code rate for forward error correction and the spreading factor for the transmission of successive ~~packets~~ packets at progressive frequencies are believed to be known in the art.

15 Page 9, line 8:

20 Assume that the system 10 in Figure 1 receives packets 40 of signals on the bus 26 from the system 20 in Figure [[4]] 3. The preamble detector 28 separates the training sequence 42 of signals indicating the synchronization, the delay profile and the channel estimation in the packets 40 and processes the signals received in accordance with the training sequence to provide the corrections (e.g. equalizers) represented by these signals. The preamble detector 28 provides on the bus 36 the signals representing the forward link parameters. These signals pass to the receive waveform processor 30 which processes the signals representing the data 38 in the packets 40. In processing the signals in the packets 40, the processor 30 despreads, demodulates and decodes the signals in accordance with the parameters indicated in the forward link parameters 32 in the preamble 34. After being despread, demodulated and decoded, the signals representing the data pass through the bus 74 for further processing of the data.

Page 10, line 14:

It may be that parameters having a higher priority than the received reverse link parameters 44 in the preamble 34 exist. These higher priority parameters may be provided by the transmitter 16 either internally or from an external source. For example, they may be provided by the higher layer network 52 and may be introduced on the bus 50 to the link adaptation controller 48 to supersede the forward link parameters on the bus 46. The signals from the higher layer network 52 may result from the fact that the system 10 may have a multiple number of layers and one of the layers such as a medium access controller (MAC) may have a higher priority than the reverse link parameters 44 on the bus 46 in providing the forward link parameters 32 for the transmitter 16 in the system 10. Although the language in this paragraph refers to one specific instance where the higher layer network 52 is adopted as the forward link parameter for the second station instead of the reverse link parameter from the first station, this can be generalized from the discussion on pages 4-10 of the specification so that each station adopts a higher layer network as the forward link parameter for the station instead of the reverse link parameter from the other station.

Page 11, line 12:

In the expression E_b/N_0 , E_b indicates bit energy and N_0 indicates noise density (in other words, the thermal noise at the receiver). The expression E_b/N_0 accordingly indicates the signal-to-noise ratio in the transmission of data between the systems 10 and 20. Furthermore, in the expression C/I , C indicates carrier power and I indicates interference power including military jamming. Delay spread indicates the time dispersive nature of the propagation medium between the systems 10 and 20. The multi-path transmission occurs when signals transmitted between the systems 10 and 20 bounce off one or more objects in their transmission between the systems, thereby delaying the reception of the signals at the second system after transmission from the first system. The channel estimator 72 accordingly takes into account various parameters

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which may affect the quality of the signals received at the second system after transmission from the first system.

Page 13, line 9:

Each packet 40 transmitted by each of the systems 10 and 20 to the other system

- 5 includes a preamble 34 and includes data after the preamble. In addition to the forward link parameters and the reverse link parameters, each preamble 34 may include a training sequence 42 which provides sequences for synchronization, channel estimation and delay profile. Parameters such as E_b/N_0 , C/I and delay spread and parameters from a higher layer network may be provided at each of the systems 10 and 20 to modify the reverse
- 10 link parameters from the other system in providing the forward link parameters 32 to be transmitted in the next packet 40 to the other system.

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